

Knollwood Energy of MA LLC PO Box 30 Chester, New Jersey 07930

October 2, 2014

NHPUC 70CT'14AM11:50

Debra A. Howland Executive Director New Hampshire Public Utilities Commission 21 South Fruit Street, Suite 10 Concord, NH 03301-2429

Dear Ms Howland,

Enclosed please find the application for the Michael Thomas system to be part of the Knollwood Energy of MA LLC (NH-II-13-089) Class II Solar Photovoltaic aggregation for New Hampshire Renewable Energy Certificates (RECs) generated from customer-sited sources, pursuant to New Hampshire Code of Administrative Rules Puc 2506.

Customer and Facility Information

Michael Thomas 9 Ironwood Drive Dover, NH 03820 603-743-6539 Michael@thomii.com

The Nepool GIS ID # for this facility is: NON43142. Also enclosed are the Simplified Process Interconnection Application and the Service Agreement and the Certificate of Completion for Simplified Process Interconnections. An electronic version has been sent to executive.director@puc.nh.gov.

Please do not hesitate to contact me if you have any questions regarding this application.

Thank you for your consideration.

Alane Labritz

Alane Lakritz President Knollwood Energy of MA LLC 862-432-0259 Alane@KnollwoodEnergy.com

Enclosures (3)



State of New Hampshire Public Utilities Commission



21 S. Fruit Street, Suite 10, Concord, NH 03301-2429

RENEWABLE ENERGY CERTIFICATE (REC) ELIGIBILITYFOR CLASS I AND CLASS II

Sources with a Capacity of 100 Kilowatts or Less

Pursuant to New Hampshire Administrative Code Puc 2500 Rules including Puc 2505.08, Certification of Certain Customer-Sited Sources

- Please submit one (1) original and two (2) paper copies of the completed application and cover letter* to: Debra
 A. Howland, Executive Director, New Hampshire Public Utilities Commission
 21 South Fruit Street, Suite 10, Concord, NH 03301-2429
- Send an electronic version of the completed application and the cover letter electronically to executive.director@puc.nh.gov.
- The cover letter must include complete contact information and identify the renewable energy class for which the
 applicant seeks eligibility. Pursuant to Puc 2505.01, the Commission is required to render a decision on an
 application within 45 days of receiving a completed application.

If you have any questions please contact Barbara Bernstein at (603) 271-6011 or Barbara Bernstein@puc.nh.gov.

□ Photovoltaic (PV) solar facilities are Class II resources. Contact <u>Barbara Bernstein@puc.nh.gov</u> for assistance.

Eligibility Requested for: Class I If the facility is part of an aggregation		Check here X if this facili	ty part of an aggregation.
name.	,1	Knollwood Energy	ofMA
	,		1
☐Provide the following information	for the owner of the P	V system.	
Applicant Name Mike T	romas Emai	i <u>Michael@</u>	thomic com
Address 9 Ironwoe	od Dr City	Dover State A	/H zip 03820.
Telephone <u>603-743-1</u>			
•			
☐For business applicants, provide to contact information).	the facility name and co	ntact information (if diffe	rent than applicant
Facility Name	Primary Co	ntact	
Address	City	State	Zip
Telephone	Cell		
Email address:			

 \Box Provide a complete list of the equipment used at the facility, including the revenue grade REC meter, and, if applicable, the inverter. Your facility will not qualify for RECs without a REC meter.

equipm ent	quantity			equipm ent	quantity		
		Туре				Туре	
PV panels	30	SolarDorlo	Mono.	other			
Inverter	<i>3</i> 0	Enphase	m250	other			
meter	1	Enphase -	GE NTR-OI	other			
utility <u>m</u> □For PS	ust be in NH cust		lication.		-	•	rom your electric nibit B - Certificate of
-		equired. Dlate capacity of your f	incility (formel o	:.		otion o	0.0
		ial date of operation (th					8.25 5/28/14.
		me, license number ar		rmation	of the in	staller, or indicate	that the equipment
Installer Name	ET	ESolar	Contac	t <u>Kel</u>	ly Sm	License #	t (if e)
Address	33	Tyler Lan	e c	ity	Ben	vick State:	VH zip 03901
Telephor		107-251-633		_email			etesolar.com
If the equ	uipment v	was installed directly by	y the customer,	please c		3	
□Provid	le the na	me and contact inform	nation of the e	quipmer	ıt vendor		
X	Check h	ere if the installer prov	ided the equipn	nent and	proceed t	o the next question.	
Business	Name			Cont	act		
Address				itv		State	7in

City

State

Zip

Telephone	email
☐ If an independent elect	rician was used, please provide the following information.
Electrician's Name Business Name Address PO Be	Nadeau Electric Email State NH Zip 0383
	e independent monitor for this facility. (A list of approved independent monitors is uc.nh.gov/Sustainable%20Energy/Renewable_Energy_Source_Eligibility.htm.) ame Tom Relly Notural Capital
	der another state's renewable portfolio standard? yes no_X of of the certification as Attachment C.
	cility is part of an aggregation, your aggregator should provide you with the
	ur facility's electrical production for Renewable Energy Certificates (RECs), you NEPOOL – GIS. Contact information for the GIS administrator follows:
•	James Webb
	Registry Administrator, APX Environmental Markets 224 Airport Parkway, Suite 600, San Jose, CA 95110 Office: 408.517.2174 jwebb@apx.com
If you are not part of an ag	gregation, Mr. Webb will assist you in obtaining a GIS facility code.
GIS Facility Code # N	

□Complete an affidavit by the applicant or qualified installer that the project is installed and operating in conformance with any applicable state/local building codes. Use either the following affidavit form or provide a separate document.		
☐The Commission requires a notarized affidavit as part of the application.		
AFFIDAVIT		
The Undersigned applicant declares under penalty of perjury that the project is installed and ope conformance with all applicable building codes.	rating in	
Applicant's Signature Clark Lattit Date 924/	14.	
Applicant's Printed Name Lakriz		
Subscribed and sworn before me this Day of (month) in the year Subscribed and sworn before me this	2014	
County of Morris State of New Jersey		
REMERE TO SERVICE THE PROPERTY OF THE SERVICE THE SERV		
Notary Public/Justice of the Peace		
	YES	
CHECK LIST: The following has been included to complete the application:	TES	
All contact information has been provided.	X	
 A copy of the interconnection agreement. PSNH Customers should include both the Interconnection Standards for Inverters Sized up to 100 KVA <u>and</u> Exhibit B – Certification of Completion for Simplified Process Interconnection. 	X	
 Documentation of the distribution utility's approval of the installation.* 	х	
 If the facility is participating in another state's renewable portfolio standard (RPS) program, documentation of certification in other state's RPS. 		
A signed and notarized attestation.		
A GIS number obtained from the GIS Administrator. x		
The document has been printed and notarized.		
• The original and 2 copies are included in the packet mailed to Debra Howland, Executive Director of the PUC.	X	
An electronic version of the completed application has been sent to	х	

executive.director@puc.nh.gov .

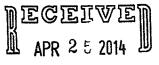
*Usually included in the interconnection agreement.	1
	J

 \Box If the application has been prepared by someone other than the applicant, complete the following. If the application was prepared by the applicant, check here and skip this section.

PREPARER'S INFORMATION

Preparer's Name	Alane Lakritz	Email	address:	alane@knollv	voodeners	gy.com		
Address PO Bo	x 30	Cit	y Chest	er	State	NJ Zip	07930	
Telephone 86	2-432-0590	. (Cell .					
Preparer's Signatu	re:	Clare.	So li					
				T				

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE INTERCONNECTION STANDARDS FOR INVERTERS APR 2 5 2014 SIZED UP TO 100 KVA



Simplified Process Interconnection Application and Service Agreement

PSNH Application Project ID#:
Contact Information:
Legal Name and Address of Interconnecting Customer (or, Company name, if appropriate)
Customer or Company Name (print): Mike + Christy Thomas V
Contact Person, if Company:
Mailing Address: 9 Ironwood Dr
- 1 /02 - 2UZ CC ZQ
Telephone (Daytime): 455 + 745 - 6559 (Evening): Auc
Facsimile Number: Nichael & Thomis. com
Alternative Contact Information (e.g., System installation contractor or coordinating company, if appropriate): Name: Kally Smith w ETE Solar Mailing Address: 32 Tyler Lane City: Berwick State: ME Zip Code: Ø3901 Telephone (Daytime): 207-251-6332 (Evening): Same Facsimile Number: D/A E-Mail Address: Kelly, Smith@etesolar, Comp
Distantianess Pergramme de Schor, com
Electrical Contractor Contact Information (if appropriate): Name: A Nadeau Mailing Address: P.C., Box 7079
City: Gonic State: NH Zip Code: 03839
Telephone (Daytime): 603-817-0120 (Evening): Samo
Facsimile Number: D/A E-Mail Address: D/A
Facility Site Information: Facility (Site) Address: 9 I Torrwood Dr. V City: Pour State: NH Zip Code: 43826
Electric
Service Company: PSNH Account Number: 56328641655 Meter Number: 61842238 V Account and Meter Number: Please consult an actual PSNH electric bill and enter the correct Account Number and Meter Number on this application. If the facility is to be installed in a new location, please provide the PSNH Work Request number.
PSNH Work Request #
Non-Default' Service Customers Only:
Competitive Electric
Energy Supply Company: Account Number:
(Customer's with a Competitive Energy Supply Company should verify the Terms & Conditions of their contract with their Energy Supply Company.)

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE INTERCONNECTION STANDARDS FOR INVERTERS SIZED UP TO 100 KVA

Simplified Process Interconnection Application and Service Agreement

Facility Machine Information:		
Generator/ Model Name &		_
Inverter Manufacturer: Enphase V Number: MG	15M /	Quantity: 30 V
Inverter Manufacturer: Enphase Number: MG Nameplate Rating: (AVA) (AVA) (AVA)	.C Volts) Phas	Quantity: 3
Nameplate Rating: The AC Nameplate rating of the individual inverter.		
System Design Capacity: (kW) (kVA)	Battery Backup: Yes 🔲 N	io D
System Design Capacity: The system total of the inverter AC ratings. If the	ere are multiple inverters inst	talled in the system, this is the
sum of the AC nameplate ratings of all inverters.	_ _	
Net Metering: If Renewably Fueled, will the account be Net Metered? Ye		
Prime Mover: Photovoltaic Reciprocating Engine Fuel Cel	I Turbine Other	
Energy Source: Solar Wind Hydro Diesel Natural	Gas 🗌 Fuel Oil 📗 Other	
Inverter-based Generating Facilities: UL 1741 / IEEE 1547.1 Compliant (Refer To Part Puc 906 Compliance Pat Yes No The standard UL 1741.1 dated May, 2007 or later, "Inverters. Converters, Systems," addresses the electrical interconnection design of various forms submit their equipment to a Nationally Recognized Testing Laboratory (Nature of the Standard on the equipment and supporting the provided by the inverter manufacturer describing the inverter's UL 1	and Controllers for Use With of generating equipment. M RTL) that verifies complian documentation. <i>Please inc</i>	Independent Power any manufacturers choose to ce with UL 1741.1. This
External Manual Disconnect Switch: An External Manual Disconnect Switch shall be installed in accordance win Interconnections For Facilities, Puc 905.01 Requirements For Disconnect Switch: Yes No Location of External Manual Disconnect Switch:	h 'Part Puc 905 Technical Req tches and 905.02 Disconnect St	tuirements For witch.
Project Estimated Install Date: May 2014 Project	Estimated In-Service Date: 4	May 2014
Interconnecting Customer Signature:		
I hereby certify that, to the best of my knowledge, all of the information particles and Conditions for Simplified Process Interconnections attached hereto		rue and I agree to the <u>Terms</u>
Customer Signature: Mike Thomas (Apr 17, 2014) Title:	Dwner	Date: Apr 17, 2014
Please include a one-line and/or three-line diagram of proposed installation in relation to the customer service panel and the PSNH meter sock returned.	tion. Diagram must indicate	the generator connection
For PSNH Use C	nly	
Approval to Install Facility:		
Installation of the Facility is approved contingent upon the Terms and Con	ditions For Simplified Proces	s Interconnections of this
Agreement, and agreement to any system modifications, if required. Are system modifications required? Yes No La To be Determ		
Are system modifications required? Yes No To be Determ	ined [_]	
Company Signature: Upehall Wotta Ti	ie: BR. ENGINEER	Date: <u>4-35-14</u>
PSNH SPIA rev. 03/14		Page 2 of 3

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE INTERCONNECTION STANDARDS FOR INVERTERS SIZED UP TO 100 KVA

Terms and Conditions for Simplified Process Interconnections

- Construction of the Facility. The Interconnecting Customer may proceed to construct the Facility in compliance with the specifications of its
 Application once the Approval to Install the Facility has been signed by the Company. Such Approval relates only to the PSNH and Puc 900
 electrical interconnection requirements, and does not convey any permissions or rights associated with permits, code enforcement, easements,
 rights of way, set back, or other physical construction issues.
- 2. Interconnection and operation. The Interconnecting Customer may operate Facility and interconnect with the Company's system once the all of the following has occurred:
 - 2.1. Municipal Inspection. Upon completing construction, the Interconnecting Customer will cause the Facility to be inspected or otherwise certified by the local electrical wiring inspector with jurisdiction.
 - 2.2. Certificate of Completion. The Interconnecting Customer returns the Certificate of Completion to the Agreement to the Company at address noted.
 - 2.3. Company has completed or waived the right to inspection.
- 3. Company Right of Inspection. The Company will make every attempt within ten (10) business days after receipt of the Certificate of Completion, and upon reasonable notice and at a mutually convenient time, conduct an inspection of the Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with the Interconnection Standard. The Company has the right to disconnect the Facility in the event of improper installation or failure to return Certificate of Completion. All projects larger than 10 kVA will be witness tested, unless waived by the Company.
- 4. Safe Operations and Maintenance. The Interconnecting Customer shall be fully responsible to operate, maintain, and repair the Facility.
- 5. Disconnection. The Company may temporarily disconnect the Facility to facilitate planned or emergency Company work.
- 6. Metering and Billing. All renewable Facilities approved under this Agreement that qualify for net metering, as approved by the Commission from time to time, and the following is necessary to implement the net metering provisions:
 - 6.1. Interconnecting Customer Provides: The Interconnecting Customer shall furnish and install, if not already in place, the necessary meter speker and wiring in accordance with accepted electrical standards. In some cases the Interconnecting Customer may be required to install a separate telephone line.
 - 6.2. Company Installs Meter. The Company will make every attempt to furnish and install a meter capable of net metering within ten (10) business days after receipt of the Certificate of Completion if inspection is waived, or within 10 business days after the inspection is completed, if such meter is not already in place.
- 7. Indemnification. Interconnecting Customer and Company shall each indemnify, defend and hold the other, its directors, officers, employees and agents (including, but not limited to, Affiliates and contractors and their employees), harmless from and against all liabilities, damages, losses, penalties, claims, demands, suits and proceedings of any nature whatsoever for personal injury (including death) or property damages to unaffiliated third parties that arise out of, or are in any manner connected with, the performance of this Agreement by that party, except to the extent that such injury or damages to unaffiliated third parties may be attributable to the negligence or willful misconduct of the party seeking indemnification.
- 8. Limitation of Liability. Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever.
- 9. Termination. This Agreement may be terminated under the following conditions:
 - 9.1. By Mutual Agreement. The Parties agree in writing to terminate the Agreement.
 - 9.2. By Interconnecting Customer. The Interconnecting Customer may terminate this Agreement by providing written notice to Company.
 - 9.3. By Company. The Company may terminate this Agreement (1) if the Facility fails to operate for any consecutive 12 month period, or (2) in the event that the Facility impairs or, in the good faith judgment of the Company, may imminently impair the operation of the electric distribution system or service to other customers or materially impairs the local circuit and the Interconnecting Customer does not cure the impairment.
- 10. Assignment/Transfer of Ownership of the Facility. This Agreement shall survive the transfer of ownership of the Facility to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the Company.
- 11. Interconnection Standard. These Terms and Conditions are pursuant to the Company's "Interconnection Standards for Inverters Sized Up to 100 kVA" for the Interconnection of Customer-Owned Generating Facilities, as approved by the Commission and as the same may be amended from time to time ("Interconnection Standard"). All defined terms set forth in these Terms and Conditions are as defined in the Interconnection Standard (see Company's website for the complete document).

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE INTERCONNECTION STANDARDS FOR INVERTERS SIZED UP TO 100 KVA (Continued)

Exhibit B - Certificate of Completion for Simplified Process Interconnections

Installation Information:	☐ Check if owner-installed
Customer or Company Name (print): Mike	Thomas
Contact Person, if Company:	1 1/4 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Mailing Address: 9 Iran wood Dr	
City: Dovas	State: NH Zip Code: <u>\$\pi 3\82\phi</u>
Telephone (Daytime): 603-743-653	(Evening): Same
Facsimile Number:	E-Mail Address:
Address of Facility (if different from above):	Tung
City:	State: Zip Code:
Generation Vendor:	Contact Person:
I herby certify that the system hardware is in compl	liance with Puc 900.
Thorog ariting difference of the control of the con	
Vendor Signature:	Date:
Electrical Contractor's Name (if appropriate): <u>L2</u>	116 Smith w/ ETE Solar
Mailing Address: 32 Tyles Lone	
City: Becuret	State: ME Zip Code: Ø39Ø
Telephone (Daytime): 207-251-633Z	(Evening): Same
Facsimile Number:	E-Mail Address: kelly. Smith@etesohccom
License number:	
Date of approval to install Facility granted by the C	Company: 25 April 7614 Installation Date: S/13/2614
Application ID number: N2940	
Inspection:	
The system has been installed and inspected in con	upliance with the local Building/Electrical Code of
POVER / Structions County	
(City/County)	
Signed (Local Electrical Wiring Inspector, or attac	h signed electrical inspection)
Name (printed): TAMES H. MALFIEL	D NEC ZOIL
Date: 5/28/14	
Customer Certification:	
I hereby certify that, to the best of my knowledge, correct. This system has been installed and shall be initial start up test required by Puc 905.04 has been	-
Customer Signature:	Date: 3/2014